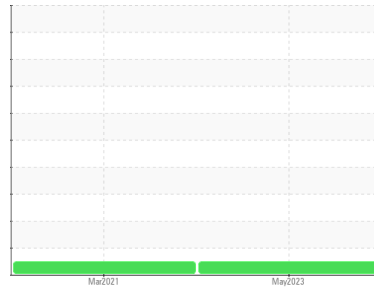




Machine Id
LIEBHERR HS895 188297
 Component
1 Winch
 Fluid
PETRO CANADA TRAXON 75W90 SYNTHETIC (--- LTR)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			LH0260277	LH0195191	---
Sample Date	Client Info			02 May 2023	18 Mar 2021	---
Machine Age	hrs	Client Info		13473	6156	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	Changed	---
Sample Status				NORMAL	NORMAL	---

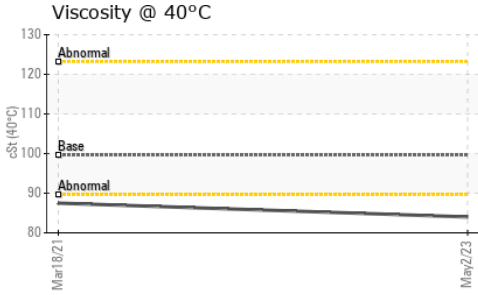
CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>150	34	24	---
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)		0	<1	---
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	---
Lead	ppm	ASTM D5185(m)	>15	0	<1	---
Copper	ppm	ASTM D5185(m)	>80	3	1	---
Tin	ppm	ASTM D5185(m)		0	0	---
Antimony	ppm	ASTM D5185(m)	>5	0	0	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	328	313	312	---
Barium	ppm	ASTM D5185(m)	1	7	3	---
Molybdenum	ppm	ASTM D5185(m)		0	<1	---
Manganese	ppm	ASTM D5185(m)		<1	<1	---
Magnesium	ppm	ASTM D5185(m)	1	4	2	---
Calcium	ppm	ASTM D5185(m)	7	13	10	---
Phosphorus	ppm	ASTM D5185(m)	1145	1357	1215	---
Zinc	ppm	ASTM D5185(m)	3	10	7	---
Sulfur	ppm	ASTM D5185(m)	17909	22168	21920	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	2	---
Sodium	ppm	ASTM D5185(m)		<1	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<1	0	---

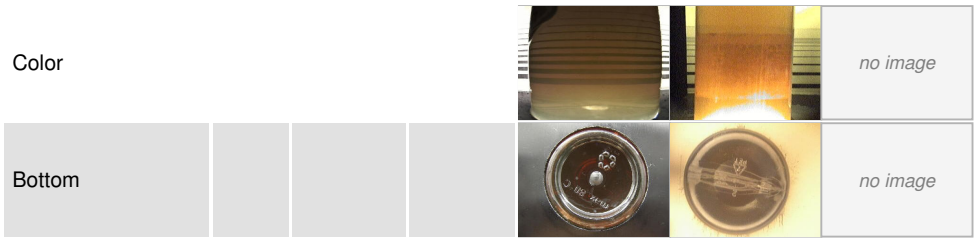
OIL ANALYSIS REPORT



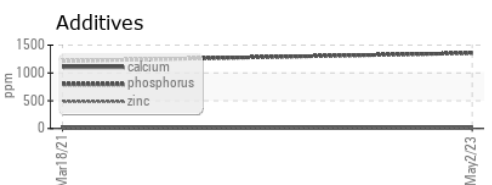
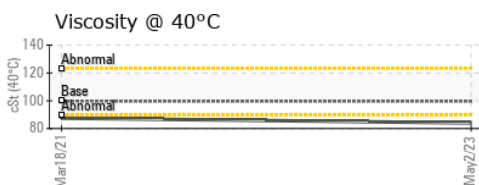
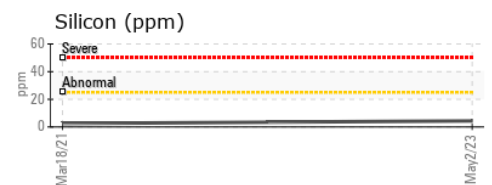
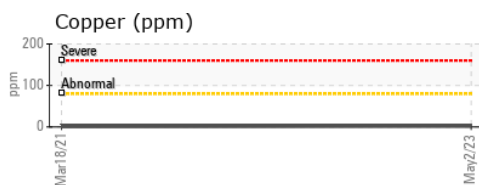
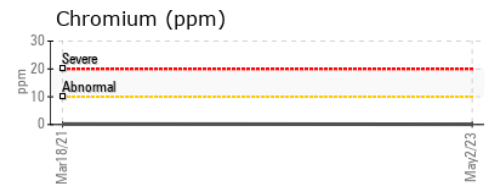
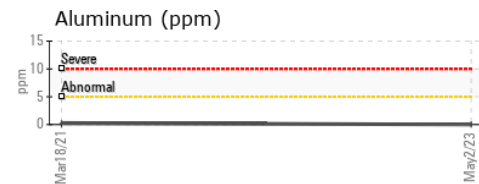
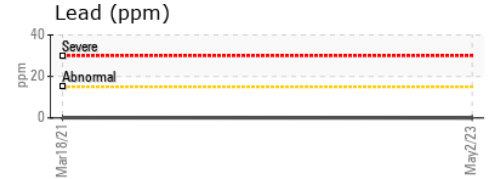
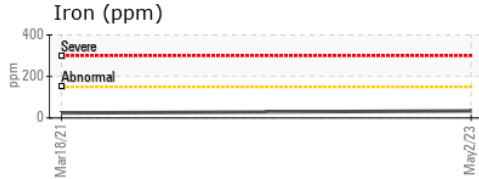
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	99.6	84.0	87.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : LH0260277 **Received** : 10 May 2023
Lab Number : **02556606** **Tested** : 10 May 2023
Unique Number : 5577646 **Diagnosed** : 10 May 2023 - Wes Davis
Test Package : MOB 1

Harbour Development
 380 Bayside Dr
 St John, NB
 CA E2J 4Y8
 Contact: Darien Edison
 edison.darien@harbourdev.com

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.